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EXAMINER

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ART UNIT	PAPER NUMBER
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UNITED STATES DEPARTMENT OF COMMERCE  
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 12

Application Number: 08/834061

Filing Date: 4/11/97

Appellant(s): Leveille

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Anthony Janiuk  
For Appellant

MAILED  
NOV 23 1999  
GROUP 700

**EXAMINER'S ANSWER**

This is in response to appellant's brief on appeal filed 7/6/99.

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

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A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3)     *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4)     *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5)     *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6)     *Issues***

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows: The rejection under 35 USC 103 has been withdrawn.

**(7)     *Grouping of Claims***

Appellant's brief includes a statement that claims 2-4, 6, 7, 9-15 and 37, claim 3, and claim 7 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

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**(8) *ClaimsAppealed***

A substantially correct copy of appealed claims 2-15 and 37 appears on pages 12, 13 and 15 of the Appendix to the appellant's brief. The minor errors are as follows: Applicants have incorrectly numbered the claims. Claims 2-15 are numbered as claims 1-14 in the appendix, and claim 37 is numbered as claim 22 in the appendix. Claims numbered 15-21, 23 and 24 are not appealed claims and should not appear in the appendix.

**(9) *Prior Art of Record***

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

Orignac, X et al. "Fabrication and Characterization of sol-gel planar waveguides Doped with Rare-earth ions", Applied Physics Lett., vol. 69, no.7., (August 12, 1996,), pp. 895-897.

Xu, W. Et al. "Effect of Curing Temperature on Green Light Emission from Er<sub>3+</sub> doped sol-gel silica glass", Journal of Non-Crystalline Solids, vol. 194 (1996), pp. 235-240.

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 2-15 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Orignac et al., Applied Physics Lett., vol. 69, no. 7, pages 895-897.

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Orignac teaches a waveguide which comprises an Nd or Er doped sol-gel medium, wherein Erbium nitrate is used as the Er salt. The Nd is taught to be contained at levels of 0.1 to 5% (approximately 0.5 to 25 weight % of Nd isopropoxide) and the erbium at levels of 1% at. (about 5.5 weight % Erbium nitrate) concentration (second column of page 895). Such waveguide has light input means and means for measuring the spectral output of light. Applicants intended use as a calibration medium does not distinguish, since applicants claims just recite a functional capability of the medium. Applicants claim also recites instrumentation which is not part of the claimed medium. It is noted that the claims which recite the instrumentation as part of the claimed subject matter have been allowed by the examiner, and are thus of different scope from those of the present claims.

2. Claims 2-4, 6, 7, 9-15 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Xu et al., Journal of Non-Crystalline Solids, vol. 194, pages 235-240, (1996).

Xu teaches an optical device comprising a laser, spectrophotometer and photomultiplier which utilizes a doped sol-gel medium comprising Erbium nitrate (see experimental details and results section). Such device has light input means and means for measuring the spectral output of light. Applicants intended use as a calibration medium does not distinguish, since applicants claims just recite a functional capability of the medium. Applicants claim also recites instrumentation which is not part of the claimed medium. It is noted that the claims which recite

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the instrumentation as part of the claimed subject matter have been allowed by the examiner, and are thus of different scope from those of the present claims.

***(II) Response to Argument***

Claims 2-15 and 37 are drawn to the calibration medium, thus applicants intended use in an optical instrument in the preamble, and use with a sensor do not distinguish the invention from the prior art, since it is the calibration medium which is being claimed. Where applicant has claimed the method or actual instrumentation such as in claims 38 and 39, such claims are deemed distinguished from the prior art, and have been allowed by the examiner. Applicant has first argued that Orignac did not select the rare earth dopants of the sol-gel monoliths to provide transmittance in the far UV range of the light source so that the spectral features would be discernible by the sensor. Although Orignac does not specify this feature, case law is replete with decisions in which the mere difference for adding a material to another is not a patentable difference (In re Jones 50 USPQ 48, In re Mod 168 USPQ 281, In re Lintner 173 USPQ 356).

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Thus although Orignac may have added the Nd or Er salts to the monolith for different reasons, such is not patentably distinguishable according to the decisions of the court. Applicant has not shown why the materials of Orignac or Xu, which are the same materials of applicants composition would not show the same spectral features. Applicant teaches the use of Erbium Nitrate in the claims and teaches at page 15, lines 19-22 that any member of the rare earth group having atomic number of 58 to 70, such as Nd which has an atomic number of 60, may be used as the dopant. The combination of these materials with the sol-gel would inherently possess the same characteristics of the present invention since the same materials are used. It is emphasized that the sensor or other instrumentation are not part of applicants claims and are a mere intended use for the calibration medium. It is well established by case law that an intended use does not give rise to patentability of an anticipated or obvious composition (In re Pearson 181 USPQ 641, In re Zierden 162 USPQ 102). Furthermore, the discovery of a new property of an old or obvious composition is not a patentable distinction (In re Tomlinson 150 USPQ 623, In re Dillon 16 USPQ2d 1897). Applicants characterization of the present claims as directed to a medium instead of a composition is incorrect, since the medium is a composition of a rare-earth dopant and a sol-gel. Applicant has argued that the concentrations of Dopant are different in the present invention than in the references. With respect to the claims that do not specifically teach a concentration, the claims do not teach any specific sensitivity of the sensor, thus the discernability would rely on external factors such as instrumentation, and not upon the concentration of the composition of the claims. With respect to claim 5 which teaches a

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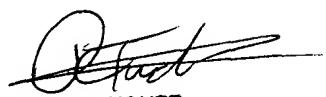
concentration of “about 6% to about 10%, it is not clear if this is a mole % or a weight %. If such is a mole % then the teaching of Nd at a level of 5 at. % by Orignac would anticipate the claim (In re Ayers 69 USPQ 109, In re DeVaney 88 USPQ 97). Similarly if the present range is weight %, then the teaching of Orignac of 0.5 to 25 weight % of Nd isopropoxide and 5.5 weight % of Erbium Nitrate would anticipate. Furthermore, Xu teaches the composition of Erbium Nitrate at a level of 1.2 mol % of the sol-gel composition., thus applicants characterization that the concentrations are a hundred fold higher in the present invention are totally incorrect.

Applicants arguments with respect the rejection under 35 USC 103 is moot since such rejection is withdrawn. It is again emphasized that applicants claims are drawn to a medium or composition which comprises the rare-earth dopant and sol-gel, and not to the instrumentation contained in the claims. In the case where such instrumentation or specific method has been recited such as in claims 38 and 39, such claims are allowed. Applicant is trying to rely on an inherent feature of the dopant rare earth material, that it displays a specific spectral feature, to distinguish over the present references. Such is not possible, since the erbium nitrate or Nd salt (according to applicants specification at page 15, lines 19-22) must possess the same spectral features in the references as in the present invention. As noted in the cited case law, applicants intended use with a sensor or discovery of a new property does not give rise to patentability in an old composition. The present rejections under 35 USC 102 are maintained.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
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PCT  
November 22, 1999

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